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**Wayne Dalton 5500/9700 Estate - Low Headroom Front Mount - TorqueMaster™ Installation Instructions Layout**

**IMPORTANT!** TITLED "REMOVING THE OLD DOOR/PREPARING THE OPENING", IF THE INSERT SHEET INSTRUCTIONS ARE NOT INCLUDED, CONTACT WAYNE-DALTON CORP. FOR A FREE COPY.

If removing an existing door, carefully follow the directions given on the insert sheet instruction in the portion titled "Removing the Old Door".

**⚠️WARNING!** REMOVAL OF AN EXISTING DOOR CAN BE DANGEROUS. FOLLOW INSERT SHEET INSTRUCTIONS CAREFULLY, OTHERWISE SEVERE OR FATAL INJURY COULD RESULT.

Begin the installation of the door by checking the opening. It must be the same size as the door. Vertical jacks must be plumbed and the header level. Side clearance, from edge of door to wall, must be minimum of 3-1/2" (89 mm) on each side. Follow the steps below. The steps correspond to the illustrations on the garage door layout. **IMPORTANT!** Stainless steel or PT 2000 Coated lag screws MUST be used when installing center bearing brackets, end bearing brackets, jamb brackets, operator mounting/support brackets and disconnect brackets on treated lumber (preservative-treated). Stainless steel lag screws are NOT necessary when installing products on untreated lumber.

**NOTE:** It is recommended that 5/16" x 1-5/8" lag screws be pilot drilled using a 3/16" drill bit, and 1/4" x 2" lag screws and 1/4" x 1-1/2" lag screws be pilot drilled using a 1/8" drill bit, prior to fastening.

For proper opening preparation refer to the portion of the insert sheet instructions titled "Preparing the Opening". **IMPORTANT!** It is recommended that doors 12" wide and over be installed by two person, to avoid possible injury.

**1 Q.I. flagangle:** Put the lower Twistlock tab on the flagangle into the Twistlock hole in the vertical track. Give the flagangle 1/4 turn to lock in place. Repeat for other side.

**Fully adjustable flagangle:** Secure the vertical to the lower slot in the flagangle using (1) stud plate and (2) 1/4"-20 flange hex nuts. Repeat for other side.

**2** Measure the length of the vertical tracks. Using the Quick Install Jamb Bracket Schedule (shown on reverse side), determine the placement of the jamb brackets for your door height. Align the Twistlock wings on each jamb bracket with the correct butyler hole in the track and turn the jamb bracket perpendicular to the track so the mounting flange is toward the back leg of the track. Set tracks aside.

**3 NOTE:** The strutting schedule below is for reference only, all struts are pre-installed at the factory.

DOOR WIDTH	QUANTITY	STRUTTING SCHEDULE		
		TOP OF TOP SECTION	TOP OF LOCK SECTION	TOP OF BOTTOM SECTION
6'0" TO 10'11"	0	N/A	N/A	N/A
11'0" TO 14'2"	1	X	N/A	N/A
14'3" TO 16'2"	2	X	N/A	N/A
16'3" TO 18'0"	3	X	X	X

**4** TorqueMaster™ drums are marked right and left. Make sure you place the cable from the right hand drum on the right hand milford pin, and left hand drum on the left hand milford pin. Uncoil the counterbalance cables and slip the loop at the ends of the cables over the milford pins on the bottom section. Insert a roller in the bottom bracket of the bottom section and insert another roller at #1 end hinge at the top of the bottom section, Fig. 4 and 7A. Repeat for right side.

**NOTE:** Bottom section can be identified by a #1 end hinge, the factory attached bottom astragal, or by the bottom bracket warning labels on each end.

**NOTE:** Verify that astragal does not protrude more than 1/2" past ends of the bottom section. If excess needs to be trimmed off, be careful not to stretch astragal, or it may end up shorter than section width.

**IMPORTANT!** Right and left hand is always determined from inside the building looking out.

**5** Before installing the bottom section, measure and cut vinyl jamb weather-stripping (may not be included) for entire garage door opening. Temporarily nail the weather-stripping to the door jambs and header. Equally space nails approximately 12" to 18" apart. Center the bottom section in the door opening. Level it using wooden shims under the bottom astragal, if necessary.

**6** Position the left hand vertical track over the rollers of the bottom section. **NOTE:** Make sure the counterbalance cable is located between the rollers and the door jamb. Secure jamb brackets and flagangles to the jamb using 5/16" x 1-5/8" lag screws. Install the right hand vertical track the same way. Hang cables over flagangles.

**IMPORTANT!** The tops of the vertical tracks must be level from side to side. If the bottom section was shimmed to level it, then the vertical track on the shimmed side, must be raised the height of the shim.

**7** **NOTE:** The lock section can be identified by a #3 end hinge for 7" high 3 section doors, and by the yellow and black warning label attached to the right side of the section. Insert rollers into both end styles of the lock section, Fig. 7A. With assistance lift section and place rollers over the tops of the vertical tracks. Install by guiding rollers into the vertical track on both sides and gently lowering the section onto the bottom section. Vertically align the mark near the center (on back) of the door, or vertically align the center styles on the face (on front) of the door. Rotate the hinge leaf upward and fasten the hinge to the above section with (2) 1/4"-14 x 5/8" self tapping screws, Fig. 7A.

**IMPORTANT!** For larger size doors, double end hinges are already pre-installed to the section(s).

Double end hinges are installed by rotating both hinge leaves upward and secure the hinges to the above section with (6) 1/4"-14 x 5/8" self tapping screws, Fig. 7B.

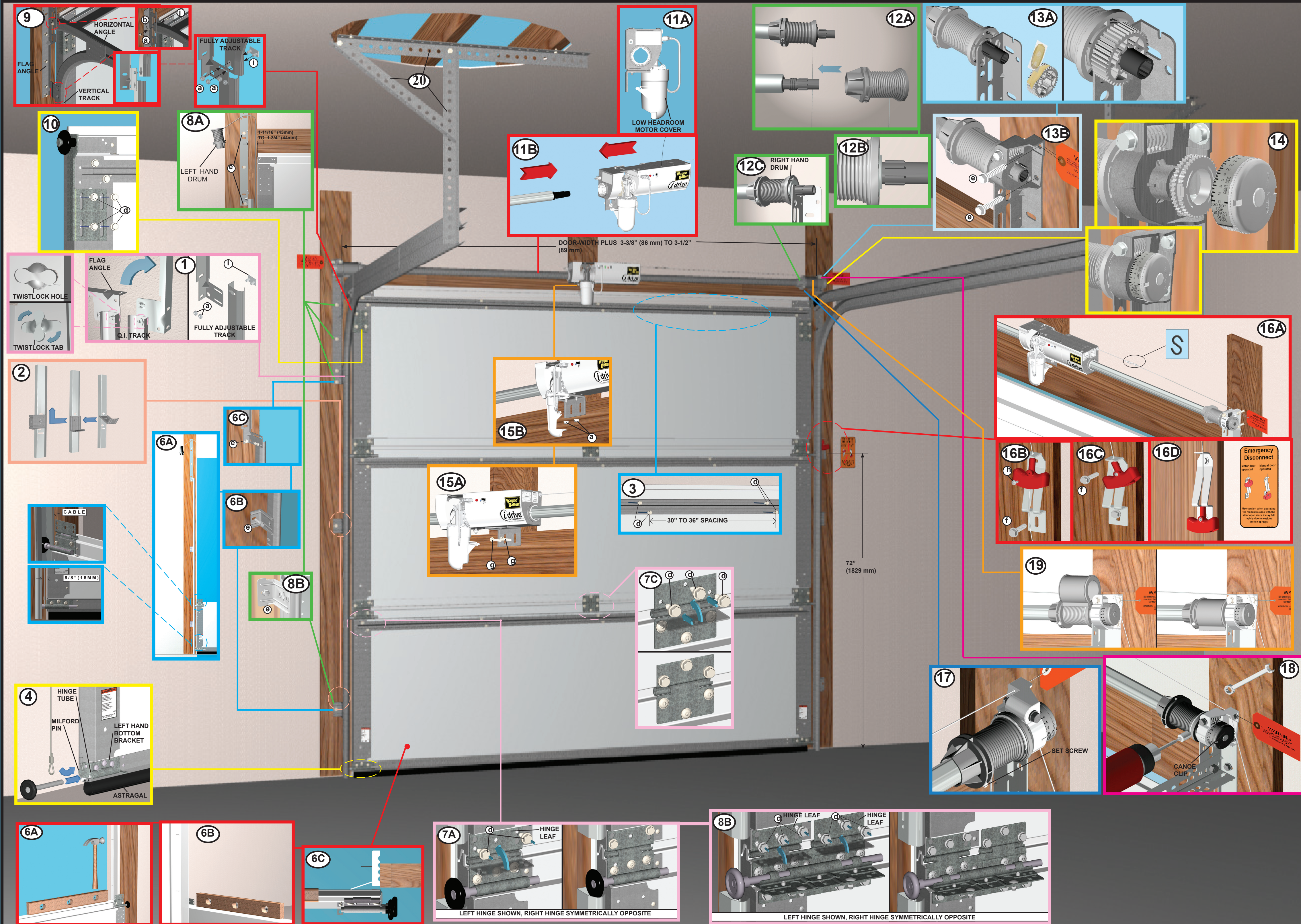
The center hinges are installed by rotating the hinge leaf upward and secure the hinge to the above section with (3) 1/4"-14 x 5/8" self tapping screws, Fig. 7C.

**IMPORTANT!** Push and hold both hinge leaves up against the section while securing with 1/4"-14 x 5/8" self tapping screws. Do not install the top section at this time.

**8** **IMPORTANT!** Operator bracket must be installed before strut (if applicable) are attached to the top section. See optional accessory on the reverse side of this manual (operator bracket).

Place top section in the door opening and secure it temporarily by driving a nail into the header near the center of the door and bending it over the section. Now fasten the rollers and the top section, Fig. 7A thru 7C. When installing a door with a TorqueMaster™ counterbalance system, vertical track alignment is critical. Position flagangle between 1-11/16" (43 mm) to 1-3/4" (44 mm) from the edge of the door. Flagangles must be parallel to the door section ends. Now complete the vertical track installation on both sides by securing the center jamb brackets and tightening the other 5/16" x 1-5/8" lag screws, Fig. 8.

**IMPORTANT!** The dimension between the flagangles must be door-width plus 3-3/8" (86mm) to 3-1/2" (89 mm) for smooth, safe door operation.



**9** To install low headroom horizontal track, align the bottom curve of the horizontal track with the top of the vertical track.

**Q.I. flagangle:** Align the key slot in each horizontal track with the quick install tabs on the corresponding flagangle. Push the curved portion of the horizontal downward to lock into place.

**Fully adjustable flagangle:** Secure each horizontal track to the corresponding flagangle with (1) stud plate and (2) 1/4"-20 flange hex nuts.

**NOTE:** On some adjustable flagangles, each horizontal track is secured to the corresponding flagangle with (2) 1/4"-20 track bolts and nuts.

Level horizontal track and bolt the top curve of the low headroom horizontal track slot in the flagangle using (1) 3/8" washer and (1) 1/4"-20 track bolt and nut. Repeat for other side.

**10** To install the low headroom top brackets, align the top slots in the low headroom top brackets with the third set of holes in the endcap as shown in Fig. 10. Fasten using (4) 1/4"-14 x 5/8" self tapping screws. Repeat for other side. Remove the nail that was temporarily holding the top section in place.

**IMPORTANT!** Failure to remove nail before attempting to raise door could cause permanent damage to top section.

**⚠️WARNING!** DO NOT RAISE DOOR UNTIL HORIZONTAL TRACKS ARE SECURED AT REAR, AS OUTLINED IN STEP 20, OR DOOR COULD FALL FROM OVERHEAD POSITION CAUSING SEVERE OR FATAL INJURY.

**11 idrive™ Installation**  
**NOTE:** For non-idrive™ operated garage doors see Alternate Installations on the reverse side of this manual. **NOTE:** For idrive™ operated garage doors, refer to 302879 insert for replacing the standard motor cover with the low headroom motor cover.

Lay the torque tube on the floor (inside garage) in front of the door with the labeled end to the left.  
**NOTE:** Opener will not slide over a torque tube label.  
Attempting to slide opener over the left end of the torque tube can damage the internal electronics.  
**NOTE:** Hold opener by the main body. Do NOT hold by the motor.  
Look into the opener's left side to ensure the left hand bearing and the internal (black) sleeve are aligned with the torque tube profile. Once aligned, slide the opener power head onto the right hand end of the torque tube. As the right end of the torque tube enters the internal (black) sleeve, rotate the opener back and forth slightly to help aid alignment.  
**NOTE:** Do not force the opener onto the torque tube if misalignment occurs.  
Continue sliding the opener power head onto the torque tube. Align the right hand bearing with the torque tube and slide the opener power head completely onto the torque tube until the torque tube exits the opener power head's right hand bearing. Continue sliding the opener power head to the center of the torque tube and plug the motor power cord into the opener power head.

**IMPORTANT!** Right and left hand is always determined from inside the garage looking out.

**12** Shake the torque tube gently to extend the winding shafts out about 5" on each side. For single spring applications, there will be no left hand winding shaft in the torque tube. Lift the torque tube and rest it on top of flagangles. Orient torque tube so that back of opener is flat against header/spring pad. Cable drums and torque tube are cam shaped to fit together only one way. To install the cable drum, slide the drum over the winding shaft until the drum seats against the torque tube. The winding shaft must extend past the drum far enough to expose the splines and the groove. Align the winding shaft groove with the round notch in the flagangle. Repeat for opposite side for double spring applications. For single spring applications, insert the left hand loose winding shaft into the left hand drum prior to sliding the drum over the torque tube.  
**NOTE:** On single spring applications, take care in handling the loose winding shaft (left side) so that it does not slide back into the torque tube.

**13** Beginning with the right hand side, lubricate entire circumference of the drive gear with the oil provided in the packet. **DO NOT SUBSTITUTE OIL.** Slide the drive gear onto the winding splines until it touches the flagangles.  
**NOTE:** No drive gear is required for the left side on single spring applications.  
**IMPORTANT!** Warning tags must be securely attached to both end brackets.  
Slide the right hand end bracket over the drive gear. Secure end bracket and the flagangle to the jamb using (2) 5/16" x 1-5/8" lag screws.

**14** Beginning with the right side, install the counter gear with the missing tooth toward the outside, away from the end bracket. Press the counter gear onto the end bracket until snaps engage. Select the right hand counter cover assembly and align the hex of the counter cam with the end of the winding shaft. Also, align the "0" on the counter cover with the raised rib on the end bracket. Press the counter cover assembly against the counter gear until it locks into place. Repeat for left hand side for double spring applications.  
**NOTE:** No drive gear, counter gear or counter cover assembly is required on left hand side for single spring applications. Only an end bracket is needed.  
**IMPORTANT!** At this time do not wind counter balance springs!

**15** Locate the spring pad. The spring pad is a vertical running board directly above the center of the door. Remove (2) 1/4"-20 flange nuts from bottom of opener power head.  
**NOTE:** Do not discard flange nuts.  
Place the support bracket underneath opener power head, to the right side of motor, centered on spring pad. Level the torque tube to the top of the door section with the idrive™ resting on the support bracket. Once torque tube is level, secure support bracket to the spring pad with (2) 1/4" x 2" lag screws. Lift and slide the opener power head over the support bracket, aligning the mounting studs with the bracket slots. Loosely fasten to mounting studs with the (2) 1/4"-20 flange nuts.  
**NOTE:** Do not tighten 1/4"-20 flange nuts to power head studs at this time.

**16** Attach the loose disconnect cable (located in operator hardware bag) to the opener power head with "S" hook. Close both ends of "S" hook to lock assembly together. Thread the disconnect cable through hole in right hand end bracket and remove all slack between power head and right hand end bracket. Mark location on right door jamb, six feet above the ground to mount disconnect handle. Thread disconnect cable through handle bracket and then handle. Align top of handle bracket with mark on wall. Remove all cable slack between the power head and top of handle bracket. Insert and tighten #6-20 x 1/2" screw until snug, and then tighten screw 1 to 1-1/2 additional turns to secure cable in handle. Trim off excess cable from bottom of handle. Holding handle bracket, remove all remaining slack between power head. With slack removed, secure bottom of handle bracket with (1) 1/4" x 1-1/2" lag screw.  
**CAUTION:** Pull handle just enough to remove the cable slack. Pulling the cable more could cause the opener power head to disconnect from the torque tube.

Rotate disconnect handle to one side exposing upper mounting hole in handle bracket. Secure handle bracket with a second 1/4" x 1-1/2" lag screw. Apply emergency disconnect label next to the mounted bracket. Use mechanical fasteners if adhesive will not adhere. Using the emergency disconnect, pull disconnect handle downwards and place it in the manual door operated position. Use disconnect label for reference. Motor will be rotated 90° from its packaged position.  
**NOTE:** If motor does not pivot 90°, see troubleshooting section in the idrive™ main installation manual.

**17** Clamp locking pliers onto both vertical tracks just above third roller. This is to prevent garage door from rising while winding counterbalance springs.  
**⚠️WARNING!** FAILURE TO CLAMP TRACK CAN ALLOW DOOR TO RAISE AND CAUSE SEVERE OR FATAL INJURY.

Adjust the counter balance cables by rotating the drum until the set screw faces directly away from the header.  
**IMPORTANT!** Do NOT double wrap counterbalance cables on TorqueMaster drums. Loosen the set screw no more than 1/2 turn. Pull on the end of the cable to remove all cable slack. Check to ensure the cable is aligned and seated in the first groove of the cable drum. Snug the set screw, then tighten an additional 1-1/2 turns. Cut off excess cable.

**CONTINUE INSTALLATION INSTRUCTIONS ON REVERSE SIDE.**

